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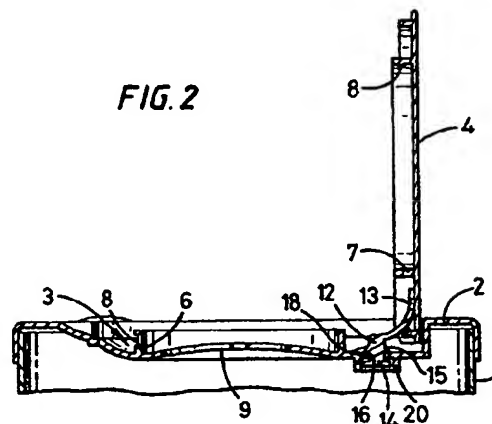
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(54) Container

(57) A container 1 with a pop-up mechanism, the container 1 including:

- a cover 2 with an aperture 9 through which contents of the container 1 can be withdrawn and a smaller opening 17, for a resilient-member, having lips 18 on opposite sides,
- an openable lid 4 hingedly connected to the cover 2 and normally closing the aperture 9,
- a resilient member 10 for biasing the lid 4 to an open position, the member having
 - a stem 12 extending through the smaller opening 17,
 - grooves 16 on the stem 12 for accommodating the lips 18 of the cover 2,
 - an anchor piece 14 larger than the smaller opening 17 and
 - a resilient finger 13 in contact with the lid 4,
- a releasable catch 6,7,8 for holding the lid 4 closed against the action of the resilient member 10; wherein at the small opening 17 the cover 1 has on its underside:
 - a fence 20 surrounding the opening 17, the fence 20 being of a size to accommodate the anchor piece 14 of the resilient member 10 below the opening 17, whereby gripping of the resilient member for its removal is inhibited.

FIG. 2



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Description

[0001] The present invention relates to a container, particularly though not exclusively for pre-moistened wipes.

[0002] It is known to provide wipes in a container having a cover with a region which can be pressed to release a lid, which opens by popping up.

[0003] Where the resilient member or spring is of elastomeric material, it is important that it should not be readily removable from the container, because wipes are often used by mothers with young children. It is relatively easy to prevent it from being pulled up through the cover - providing an anchor piece much larger than the aperture through which it would be drawn - however the cover is usually removable and a child can grasp the anchor piece and pull the spring out backwards.

[0004] The object of the invention is to overcome this problem.

[0005] According to the invention there is provided a container with a pop-up mechanism, the container including:

- a cover with an aperture through which contents of the container can be withdrawn and a smaller, resilient-member opening having lips on opposite sides,
- an openable lid hingedly connected to the cover and normally closing the aperture,
- a resilient member for biasing the lid to an open position, the member having
 - a stem extending through the resilient member-aperture,
 - grooves on the stem for accommodating the lips of the cover,
 - an anchor piece larger than the small opening and
 - a resilient finger in contact with the lid,
- a releasable catch for holding the lid closed against the action of the resilient member; wherein at the small opening the cover has on its underside:
- a fence surrounding the opening, the fence being of a size to accommodate the anchor piece of the resilient member below the opening, whereby gripping of the resilient member for its removal is inhibited.

[0006] Normally the resilient member will be of elastomeric material.

[0007] To help understanding of the invention, a specific embodiment thereof will now be described, by way of example and with reference to the accompanying drawing, in which:

Figure 1 is a perspective view of a container of the invention, with its lid open,

Figure 2 is a cross-sectional end view on the line I-I in Figure 1 at a larger scale through the lid when open and

Figure 3 is a similar view with the lid closed.

[0008] The container shown in the drawings has a base 1 typically for pre-moistened wipes and a cover 2. The base and the cover are injection mouldings. The cover has a central recess 3. A lid 4 sized to fit the recess is hinged to the cover, both components having complementary hinge formations 5, which are conventional in themselves. Both the cover and the lid have complementary flanges 6,7, which have catch formations 8. Within the cover flange a contoured slot 9 is provided for withdrawal of wipes from the container. Between the hinge formations 5, an elastomeric spring 10 is provided. This urges the lid open with the catch formations holding it closed. Deformation of the cover, particularly at dimples 11, releases the catch for opening of the lid.

[0009] The spring is a cut off piece of an extrusion. It has a stem 12 and a finger 13. On the stem, a base 14 is provided with ribs 15 spaced up from the base and defining with it grooves 16. The cover has an opening 17 sized to fit the stem 12, with its marginal lips 18 fitting in the grooves 16. This arrangement is adequate for holding the spring, whose finger 13 is bent double when the lid is closed, and reacting the bending in the spring so that the lid is opened by the spring when the catch is released. However, the arrangement described is not adequate for preventing "little fingers" removing and swallowing the spring, having prised off the cover.

[0010] The invention addresses this problem by providing a fence 20 around the opening 17 on the underside of the cover. The fence is substantially the same height as the thickness of the base and sized radially of the base to leave a gap of the order of 1mm, which is too small to allow a small child to grip and pick out the spring.

Claims

1. A container 1 with a pop-up mechanism, the container 1 including:

- a cover 2 with an aperture 9 through which contents of the container 1 can be withdrawn and a smaller opening 17, for a resilient-member, having lips 18 on opposite sides,
- an openable lid 4 hingedly connected to the cover 2 and normally closing the aperture 9,
- a resilient member 10 for biasing the lid 4 to an open position, the member having
 - a stem 12 extending through the smaller opening 17,
 - grooves 16 on the stem 12 for accommodating the lips 18 of the cover 2,

- an anchor piece 14 larger than the smaller opening 17 and
 - a resilient finger 13 in contact with the lid 4,
 - a releasable catch 6,7,8 for holding the lid 4 5
closed against the action of the resilient member 10;
wherein at the small opening 17 the cover 1 has on its underside:
 - a fence 20 surrounding the opening 17, the 10
fence 20 being of a size to accommodate the anchor piece 14 of the resilient member 10 below the opening 17, whereby gripping of the resilient member for its removal is inhibited, 15
2. A container with a pop-up mechanism as claimed in claim 1, characterised in that the resilient member is of elastomeric material.
3. A container with a pop-up mechanism as claimed in 20
any preceding claim, characterised in that the fence 20 is substantially the same height as the thickness of the anchor piece 14.
4. A container as claimed in claim 3, characterised in 25
that the diameter of the fence 20 is sized to leave a gap of the order of 1 mm between the smaller opening 17, and the fence 20.

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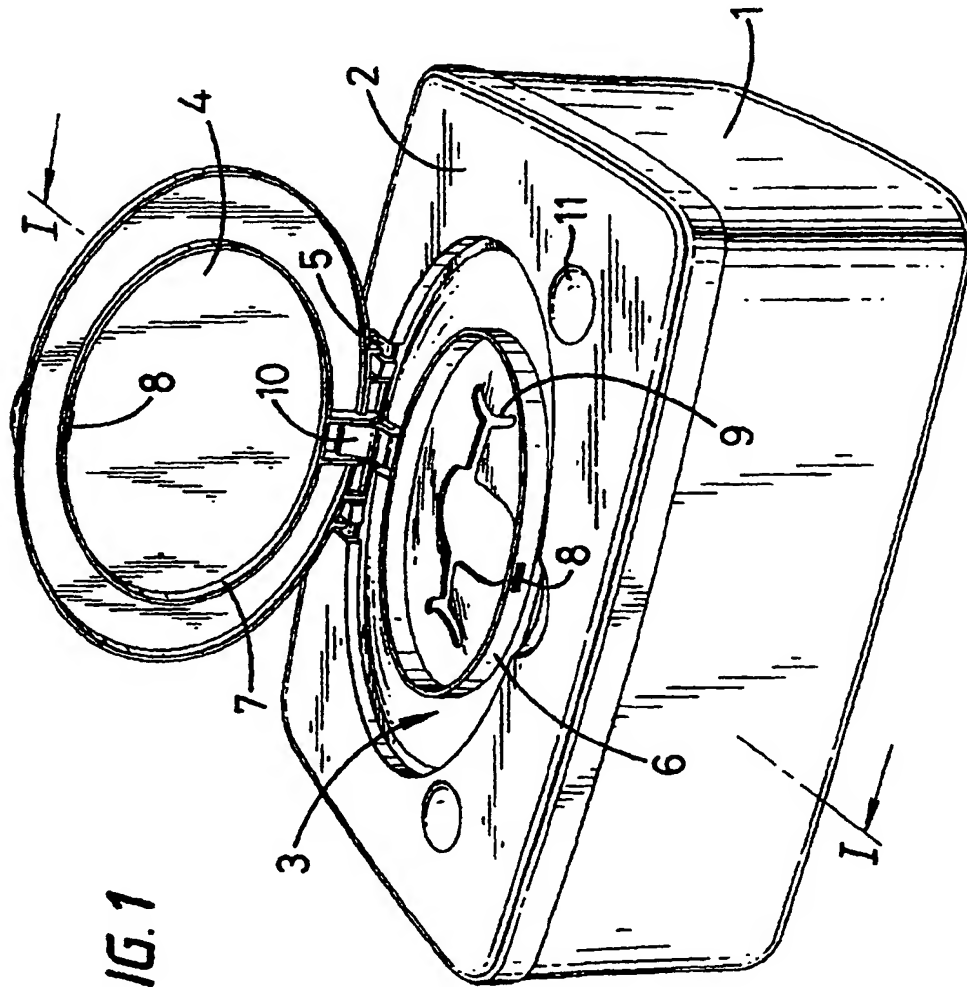


FIG. 1

FIG. 2

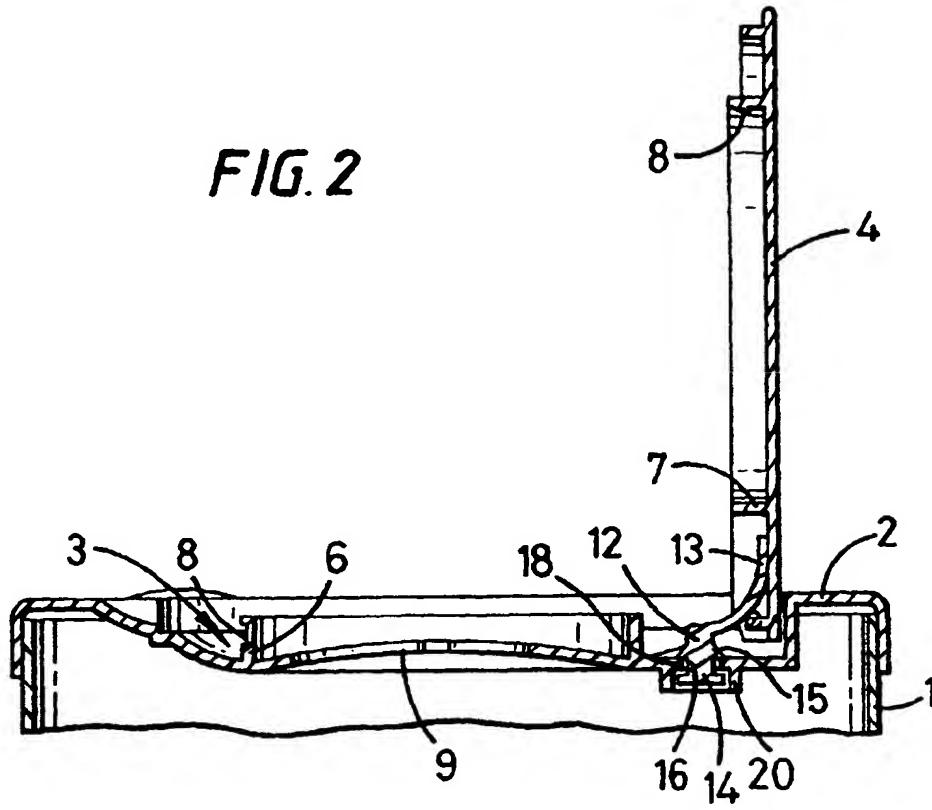
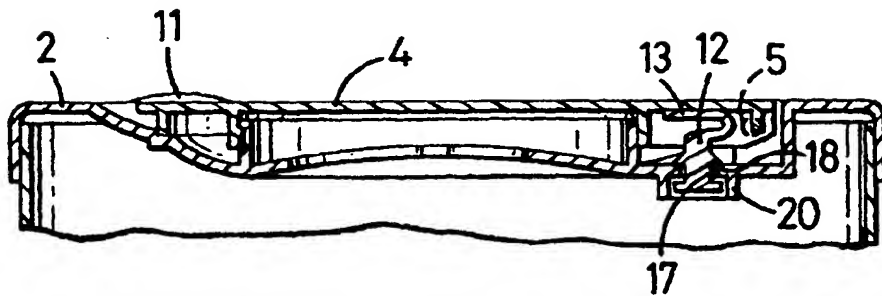


FIG. 3





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EUROPEAN SEARCH REPORT

Application Number
EP 99 20 1299

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			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
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The present search report has been drawn up for all claims			
Place of search BERLIN		Date of completion of the search 5 August 1999	Examiner Olsson, B
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82